

HCC Life Insurance Company Operating as Tokio Marine HCC – Stop Loss Group



2023

ANNUAL MARKET REPORT

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MESSAGE FROM THE PRESIDENT

Tokio Marine HCC – Stop Loss Group (TMHCC) is pleased to present to you our 2023 Annual Market Report. In the pages that follow, we will give you information that we believe will be useful as you consult with your clients on the challenges of offering competitive health care benefits to their employees and their families. Topics we will cover include the continued escalation of catastrophic claims, increased numbers of approved cell and gene therapies, top diagnostic categories, trends in transplants and more. We will also provide what we consider to be helpful advice around specific deductible levels and expected duration of stop loss claims, and some benefit and administrative solutions that we offer.

We have made a few changes to the report this year and added a new feature – the inclusion of several QR codes in the report. These codes will link you to more information on the topics we cover. We refer to these as “knowledge point deep dives” that you can access at your convenience. Providing the information in this fashion will also allow us to continuously refresh the data throughout the year, with the added benefit that you will always have current data when you click on a code.

Our observations of the latest trends demonstrate that the challenges and complexities of the health care marketplace have continued to expand over the years, and 2023 further reflects these challenges. Catastrophic claims continue to grow from both a severity and frequency perspective. In fact, we have seen over 10 times more \$2 million+ claims in 2022 than we did in 2013! And our experience demonstrates that the COVID “hush” in 2020 and 2021 was indeed followed by the COVID “crush” in 2022 and into 2023. Furthermore, the pandemic’s suppression of hospital revenues has also caused the industry to attempt to recoup losses by increasing margins on claim submissions, especially on catastrophic claims.

In looking at our Top 10 Diagnosis results, we continue to see cancers and cardiovascular diseases at the top of the list, but in 2022 these are followed by perinatal/neonatal claims, spurred by an increase in the frequency and severity of premature babies. Transplants and diseases treatable by high-cost specialty drugs or therapies are also among the most expensive claims we have paid.

Gene and cell therapies continue to expand. There are now 6 approved gene therapies, with 8 more anticipated to be approved by the FDA in 2023. These therapies are sending a shock wave throughout the self-funded community, as employers are trying to grapple with coverage of these low frequency but very expensive episodes of care.

In this report, we have also included information about appropriate stop loss deductible levels and expected duration of claim submission that we hope you can incorporate into your day-to-day consulting practices. We also encourage you to talk with us about our Simple. Smart. Secure. Because Service Matters™ (S3) solution, which features administrative efficiencies in the claims and underwriting process, as well as our market-leading Organ Transplant product, which shifts the burden of high-cost transplant exposure from your clients to us.

We appreciate your interest in this report, and we welcome your feedback – not only on the content of the report, but about other information you’d like to see in future editions. If you have any questions as you read through the information that follows, please reach out to us. Thanks again, and we look forward to hearing from you!





SIMPLE. SECURE. SMART.™

Clients have benefited from our expertise for over 45 years. One of our more recent initiatives connects existing services to a new platform servicing TPAs and producers. Simple. Secure. Smart. Because Service Matters (S3)™ is our service center that allows us to offer quick and efficient stop loss interactions with participating TPAs and producers. What began as an idea three years ago, turned into a pilot in 2021, and we are now active with multiple TPAs. Through the foundational component of S3™, our first-dollar database allows all claims to be sent from participating TPAs to TMHCC for review and reimbursement by our dedicated staff, saving time and money while providing quicker access to data. In the near future, on-demand claims reporting will be accessed by TPAs and producers, providing live updates on claimants.

Timely filing is no longer a concern since TMHCC will automatically “file” the stop loss reimbursement request when a claimant penetrates the specific deductible threshold.

In return, this increases TPA operational efficiency and may reduce potential E&O liability. This service changes the TPAs’ position from “claim filers” to “claim reconcilers”, ensuring all claims are filed. TMHCC and TPAs will look more like a single payer and be more competitive in the marketplace.

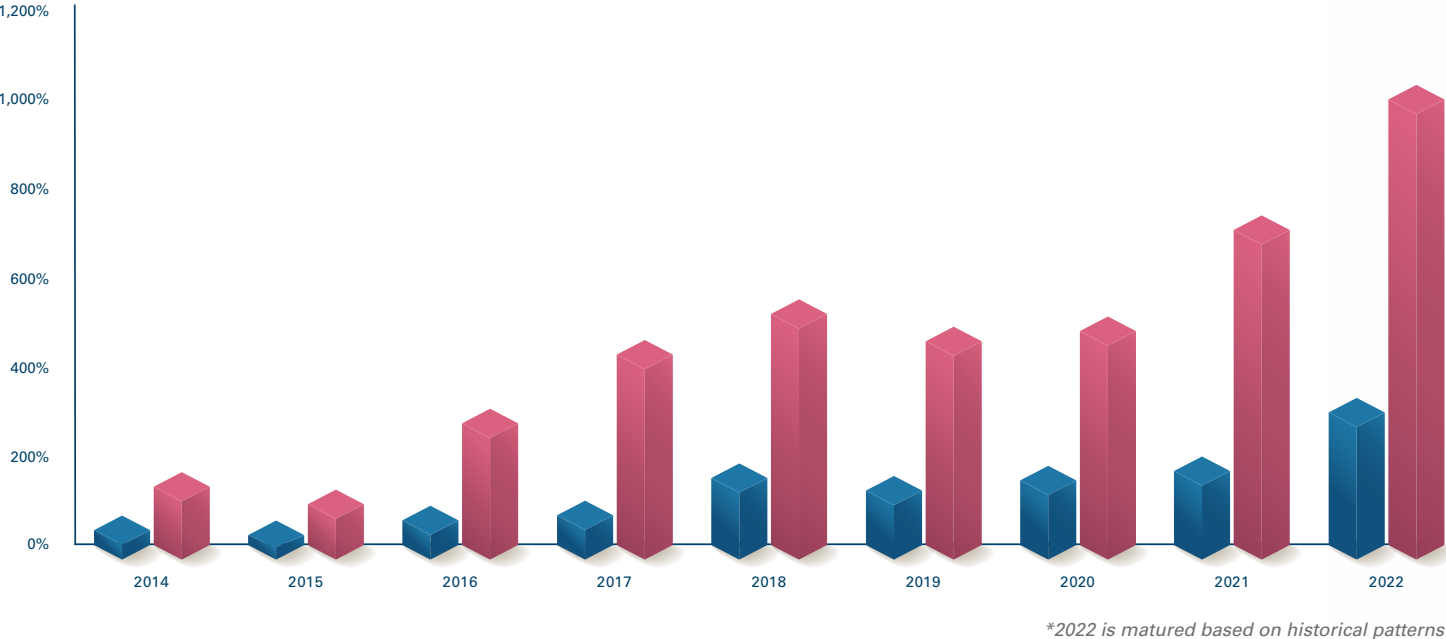
Service matters to TMHCC, which is why S3™ provides more benefits than a typical producer portal. S3™ is a dedicated resource for producers to see their financial documents and reports such as 5500 reports, captive accounting and premium accounting. S3™ benefits producers by providing on-demand reporting, reduced E&O exposure for claim filings, automated claims filing, no renewal reports and faster reimbursements.

TMHCC also benefits from the S3™ service platform as it increases operational efficiency, provides quicker access to data and reduces turnaround time for claims after processing. Having the necessary data will allow our underwriting staff to be more comfortable, confident and accurate when evaluating risk, leading to better pricing on renewal offerings. It purposefully reduces the friction in stop loss interactions between TMHCC, TPAs and the producers who rely on quick and efficient processes for their clients. We are taking this approach to improve the efficient exchange of data that is paramount to our collective success.



MILLION DOLLAR CLAIMS

TMHCC – Stop Loss Group has continued to see a significant increase in both frequency and severity of stop loss claims over \$1 million, and even more of an increase in claims over \$2 million. The graph below represents the cumulative increase in the number of large claims over these thresholds since 2013. In 2022, while the \$1 million+ claim frequency has increased by 340%, the \$2 million+ claim frequency is even more astonishing at over a 1,000% increase.



\$1 Mill+ **\$2 Mill+**

UP-TO-DATE FREQUENCY AND SEVERITY

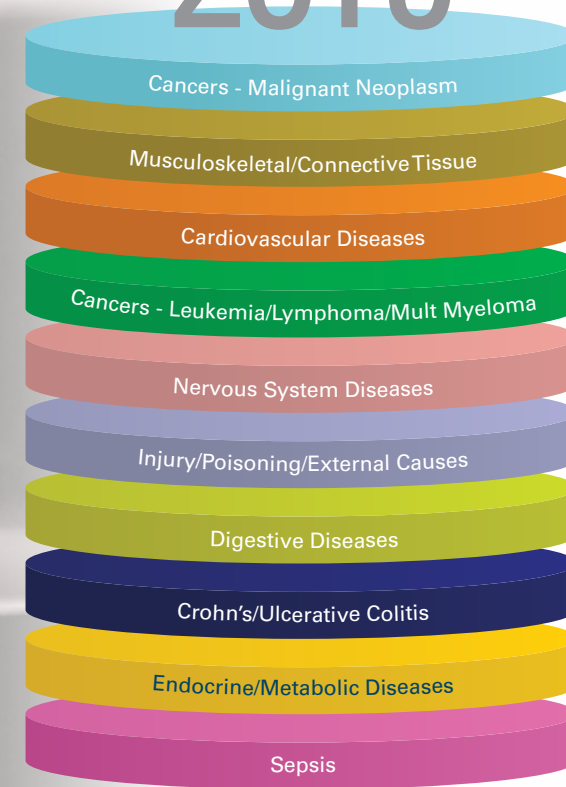
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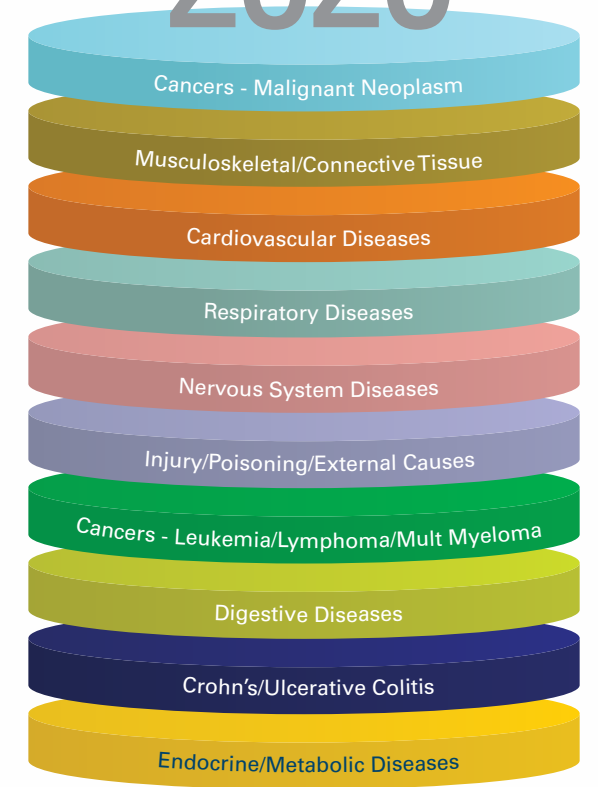
TOP 10 DIAGNOSTIC CATEGORIES BY FREQUENCY 2019-2022



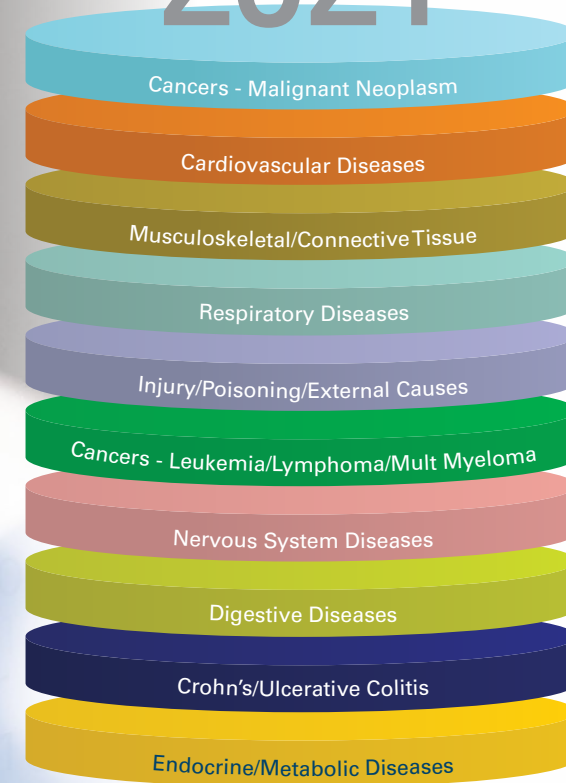
2019



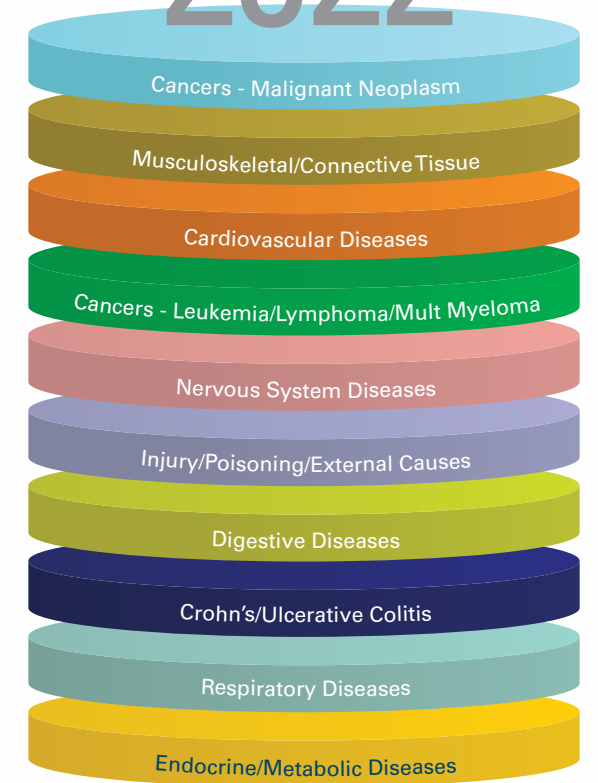
2020



2021



2022

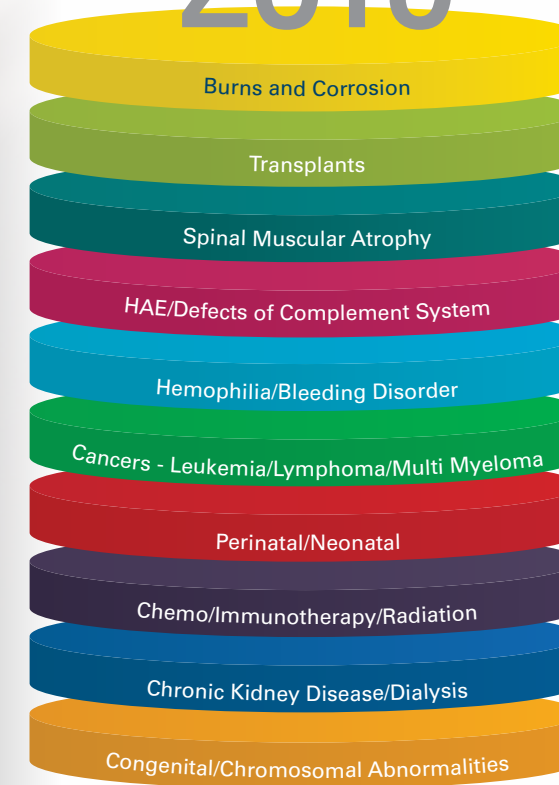


Cancers – Malignant Neoplasm has been TMHCC’s most frequent stop loss claim each of the past 4 years, followed by Musculoskeletal/Connective Tissue and Cardiovascular Diseases claims. Injury/Poisoning/External Causes continue to make it into our top 10 most frequent claims every year. Respiratory Diseases have replaced Sepsis over the past 3 years, undoubtedly due to the COVID-19 pandemic.

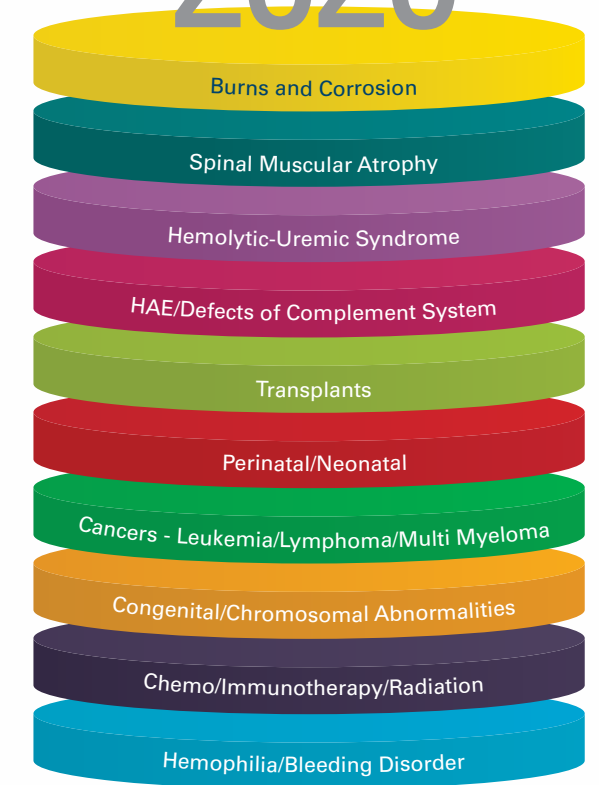
TOP 10 DIAGNOSTIC CATEGORIES BY SEVERITY 2019-2022



2019



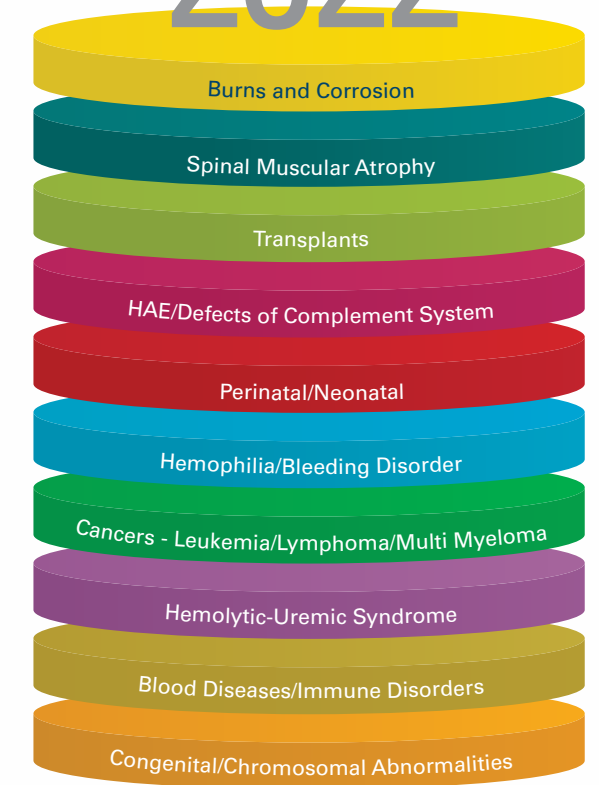
2020



2021



2022



Burns and Corrosion has once again returned to the #1 most severe claim diagnosis in 2022. This category noticeably did not make the top 10 list in 2021 (TMHCC sees few of these unpredictable claims, so the average severity is heavily impacted by a single smaller claim). Transplants have remained in the top 3 most severe claims again in 2022 (see pages 20-21, "Trends in Transplants" for information on transplant claims).

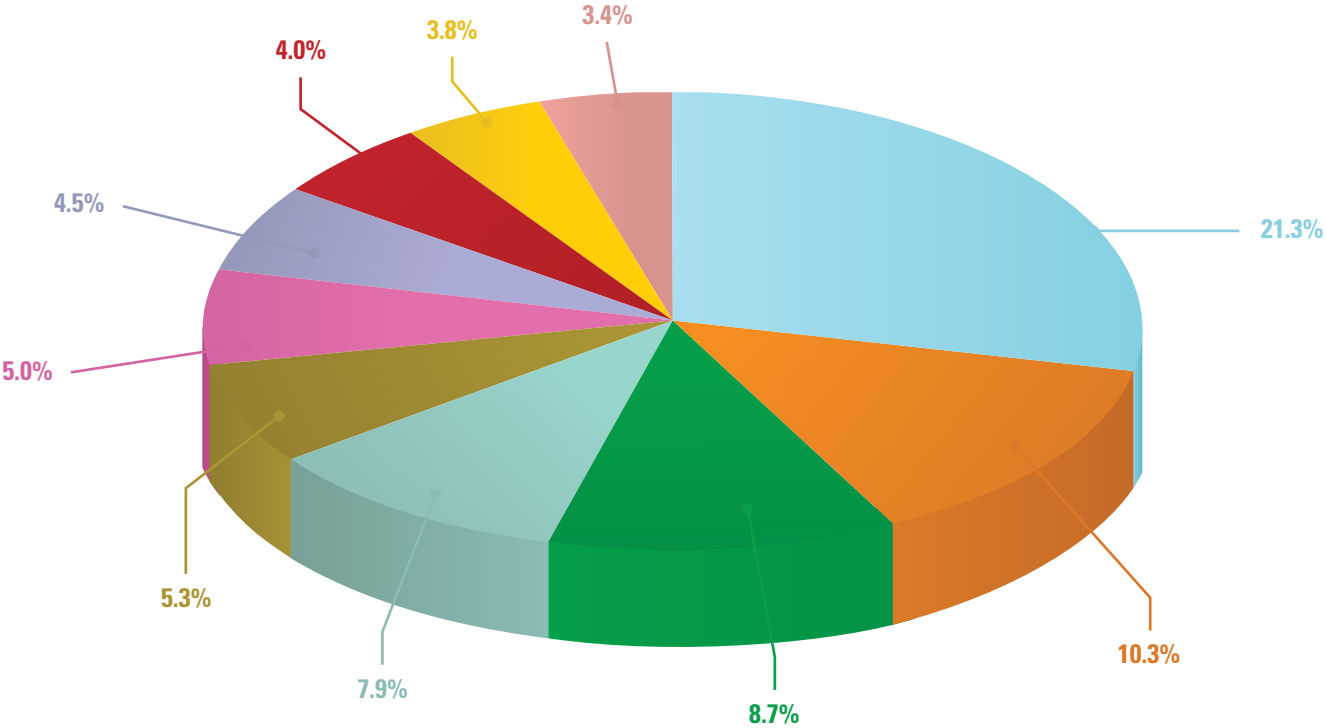
Perinatal/Neonatal claims have increased in severity since last year, becoming our 5th most severe claim in 2022. A new category, Blood Diseases/Immune Disorders, appeared in 2022's top 10 severity categories. Spinal Muscular Atrophy and Hemolytic-Uremic Syndrome are two of our most severe claims, as both are treatable with high-cost specialty drugs or gene therapies.

TOP 10 DIAGNOSTIC CATEGORIES BY TOTAL COST

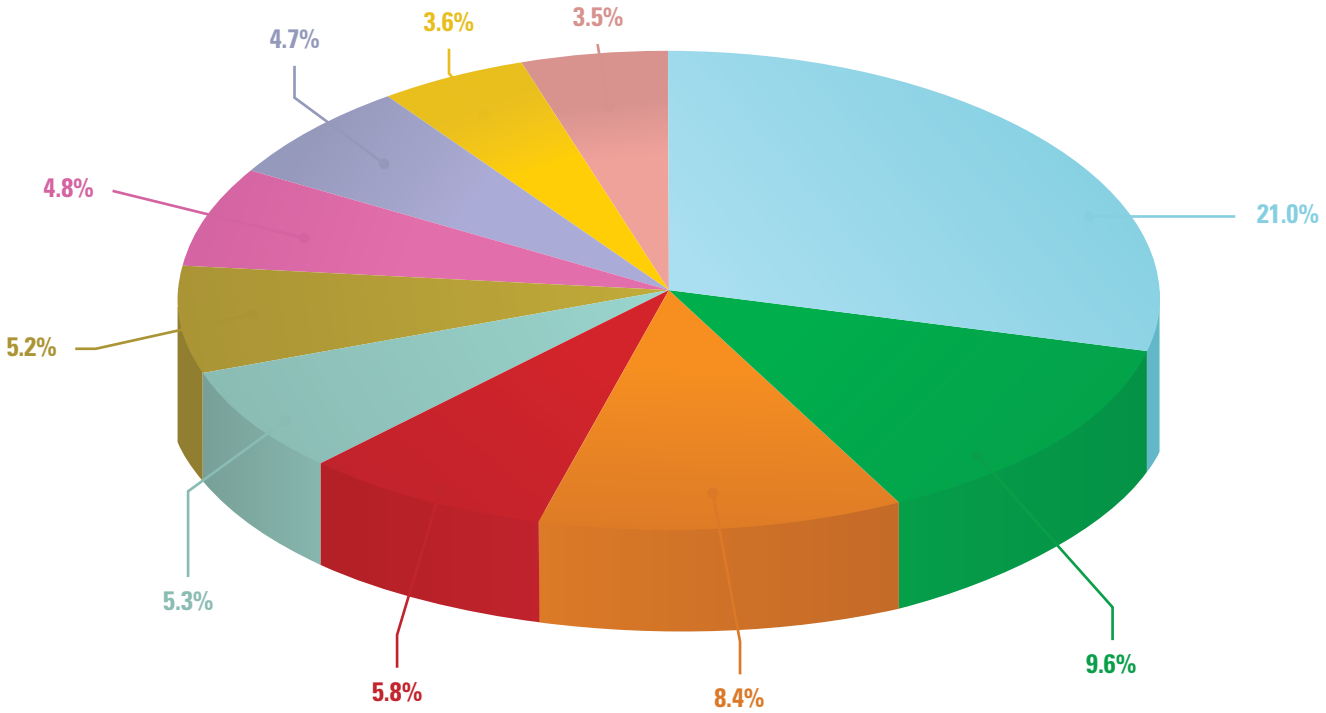
The below charts contain TMHCC's top 10 diagnostic categories as a portion of total cost over the past two years. Cancers – Malignant Neoplasm remains our top diagnosis contributing to total costs. Perinatal/Neonatal claims have grown as a portion of total cost by 1.8 points in 2022. Cardiovascular Diseases and Respiratory Diseases have both decreased in percent of total cost since 2021. The overall percentage of total cost from 2022's top 10 categories (72%) has also decreased by 2 points since 2021 (74%), indicating that other categories outside these top 10 are contributing slightly more to total costs.

- Cancers - Malignant Neoplasm
- Cancers - Leukemia/Lymphoma/Mult Myeloma
- Cardiovascular Diseases
- Perinatal/Neonatal Diseases
- Respiratory Diseases
- Musculoskeletal/Connective Tissue
- Sepsis
- Injury/Poisoning/External Causes
- Endocrine/Metabolic Diseases
- Nervous System Diseases

2021



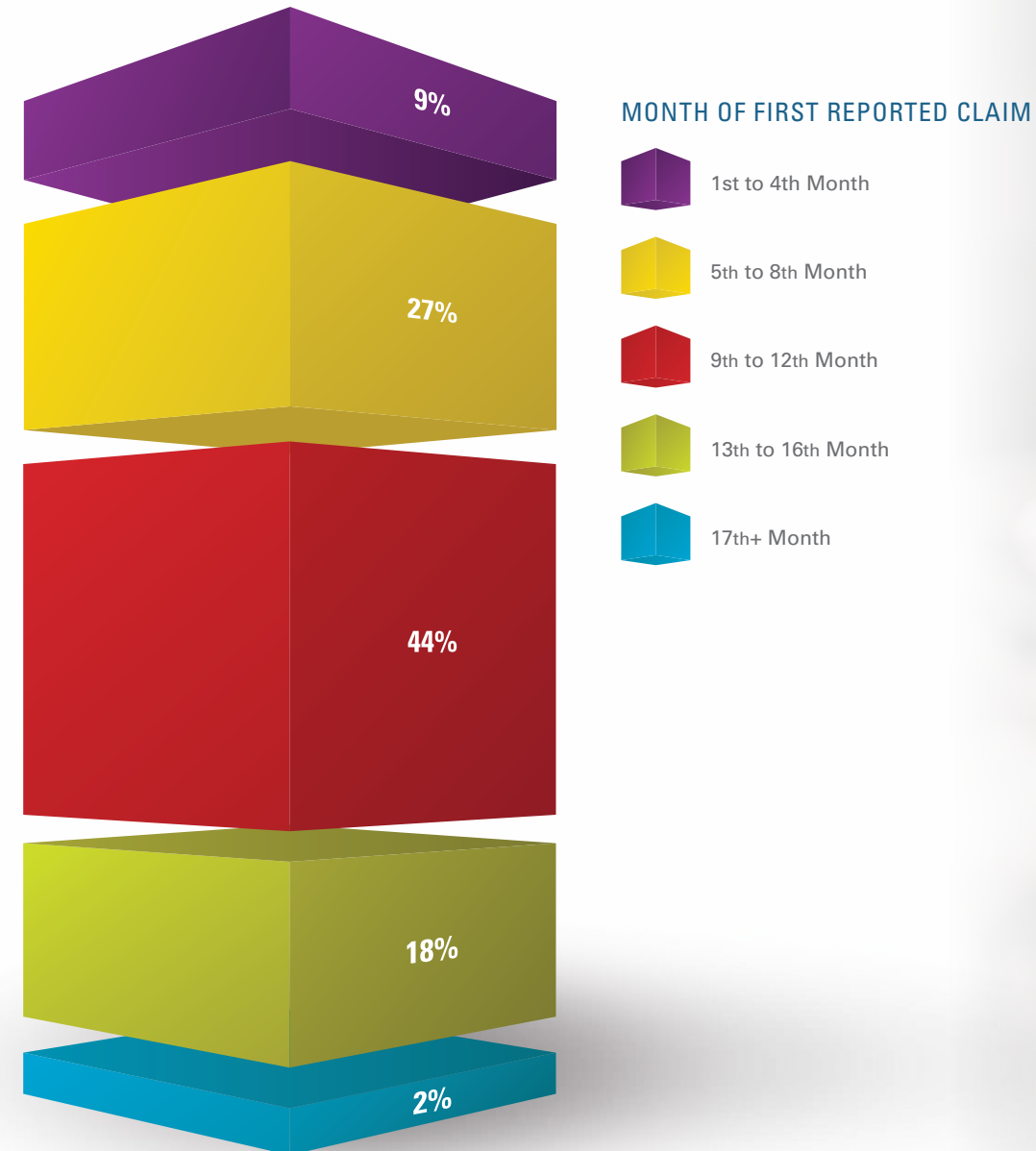
2022



STOP LOSS CLAIMS BY DURATION

Average Month of First Reported Claim from Policy Effective Date

Many of our producers ask for “early locks” of 120 days or more for their clients’ stop loss coverage, often spurred by their clients’ budgeting process. However, illustrated by the graph below, on 64% of our policies, TMHCC – Stop Loss Group does not even see the first claim until the ninth month of the policy year or later, making it very difficult to predict how the most recent experience year will turn out. Underwriters therefore must use caution given this risk uncertainty, which often results in higher rates for the policyholder. Based on this we continue to believe that more accurate pricing comes when we work on renewals during traditional timelines using month 9 or 10 data.



UP-TO-DATE NAIC STOP LOSS INDUSTRY DATA

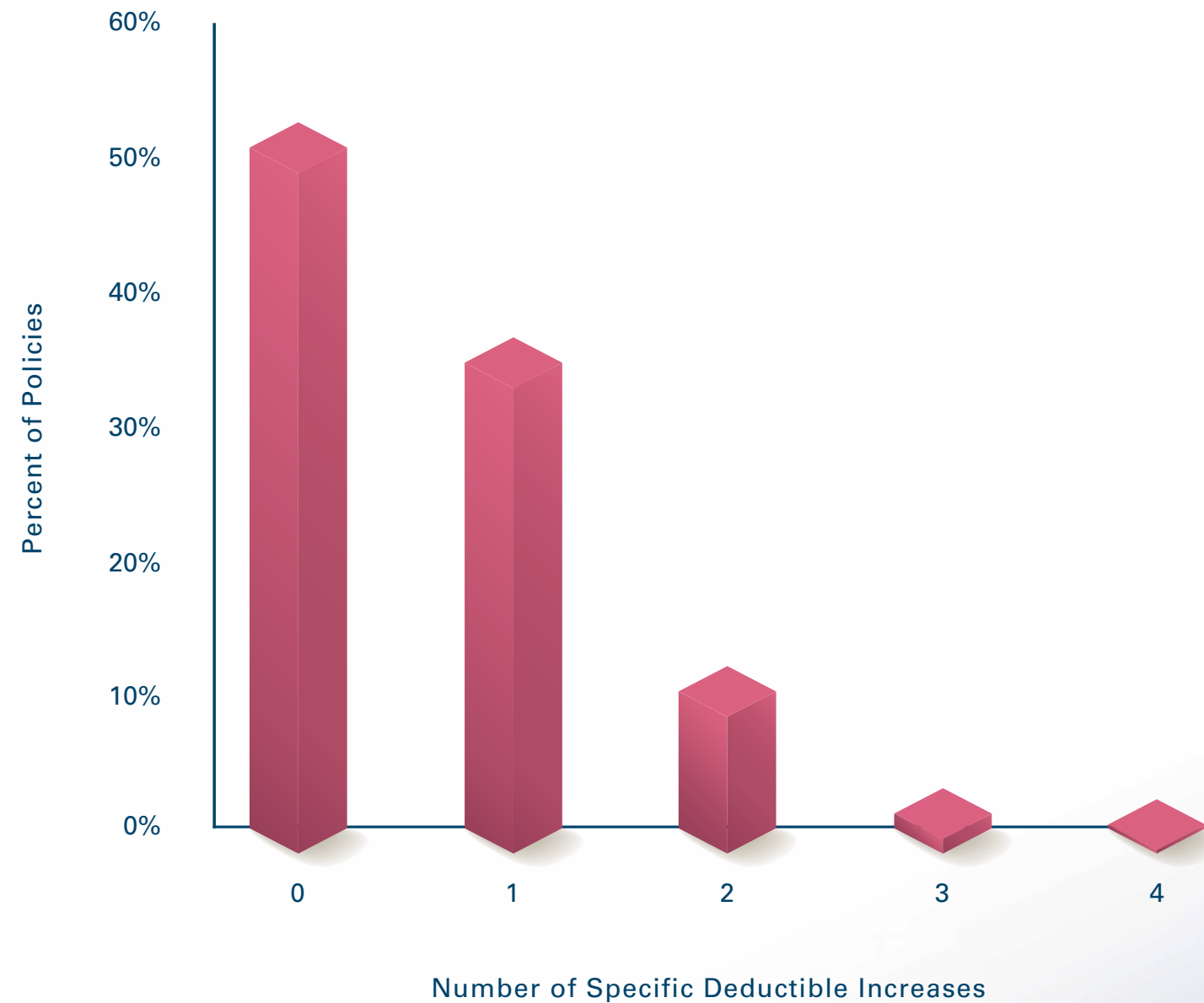
Data will be updated periodically. Continue to check back for updated information.



EVOLUTION OF SPECIFIC DEDUCTIBLES

Maintaining an appropriate specific deductible is one way to mitigate leveraged trend impacts on your clients' stop loss rates. We conducted a study on TMHCC's renewal policies that have been in our block since at least 2018. As the graph below illustrates, over half of these policies did not increase their specific deductible even one time in the last five years. To help keep rate increases in check, we recommend advising your clients to increase their specific deductible at least once, if not two or more times over a five-year period.

NUMBER OF TIMES GROUPS INCREASED SPECIFIC DEDUCTIBLE OVER 5 YEARS



SPECIFIC DEDUCTIBLE THRESHOLDS

UP-TO-DATE SPECIFIC DEDUCTIBLE THRESHOLDS

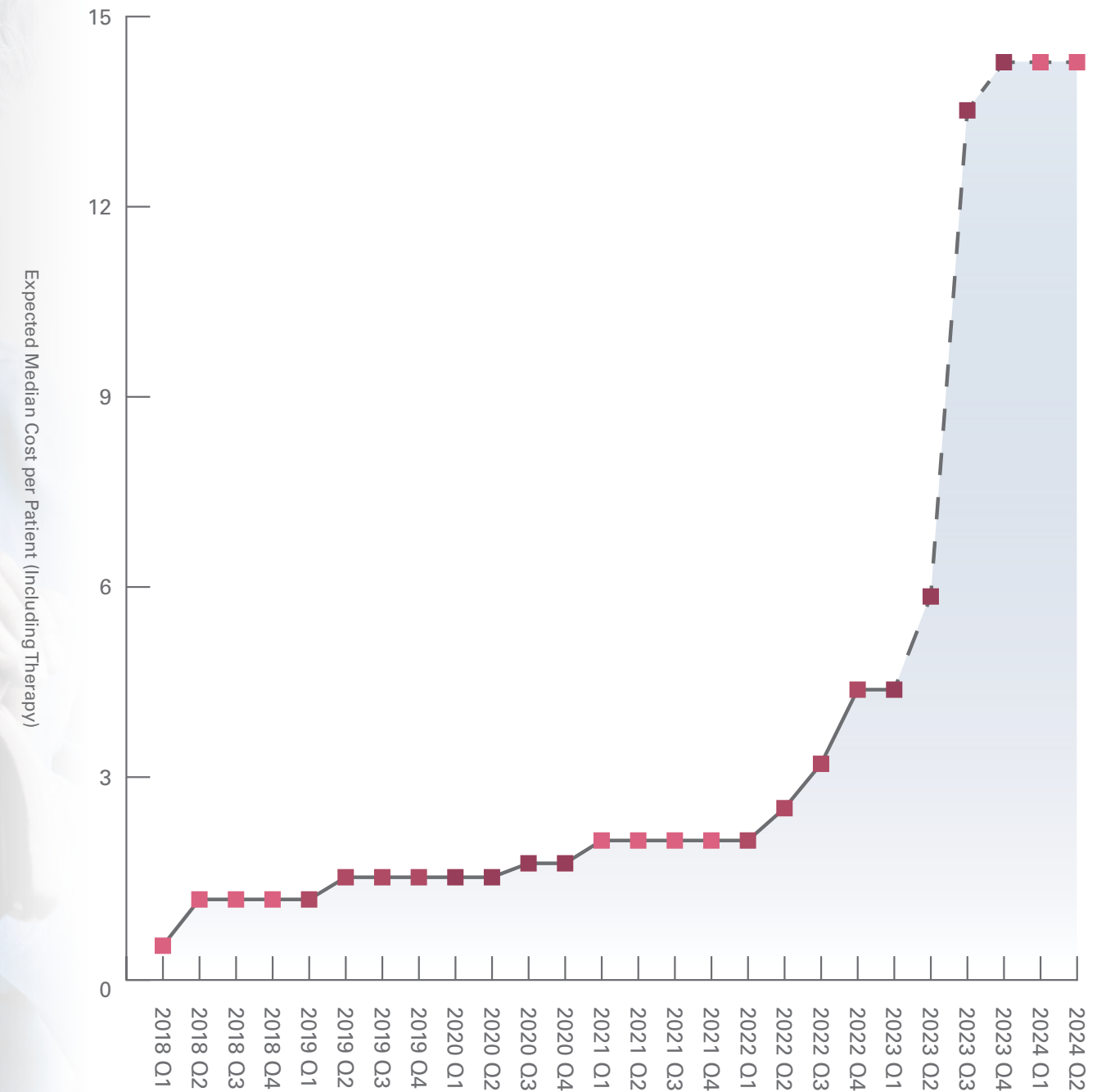


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Continue to check back for updated information.



EMERGING THERAPY SOLUTIONS PIPELINE REPORT / PEPM COST IMPACT

The expected approval dates of a great number of cell and gene therapies are rapidly approaching. The graph below, which is projected from actual TMHCC – Stop Loss Group’s experience, suggests that if therapies are approved in the expected timeline, the cost of cell and gene therapies in 2024 could more than triple the cost in 2022 on a Per Employee Per Month (PEPM) basis.



Expected Median Cost per Patient (Including Therapy)

Cumulative PEPM Over Projected Timeline

Solid line represents known information
 Dotted line represents projected information

UP-TO-DATE CELL AND GENE THERAPIES

Data will be updated periodically.
 Continue to check back for updated information.

TRENDS IN TRANSPLANTS

IN 2022

42,887

organ transplants were performed in the United States, an increase of 3.7% over 2021 and a new annual record.

The four organ types most commonly transplanted all set annual volume records. Those totals were:

25,498

KIDNEYS

9,528

LIVERS

4,111

HEARTS

2,692

LUNGS

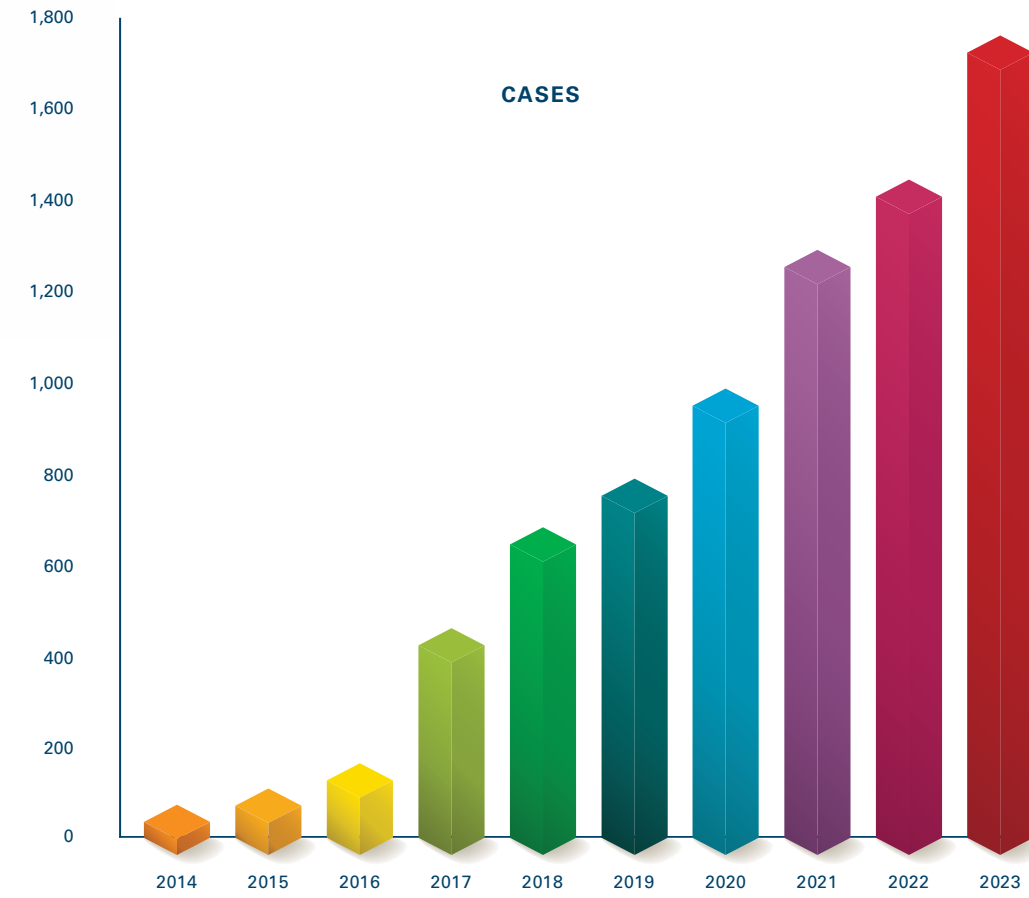
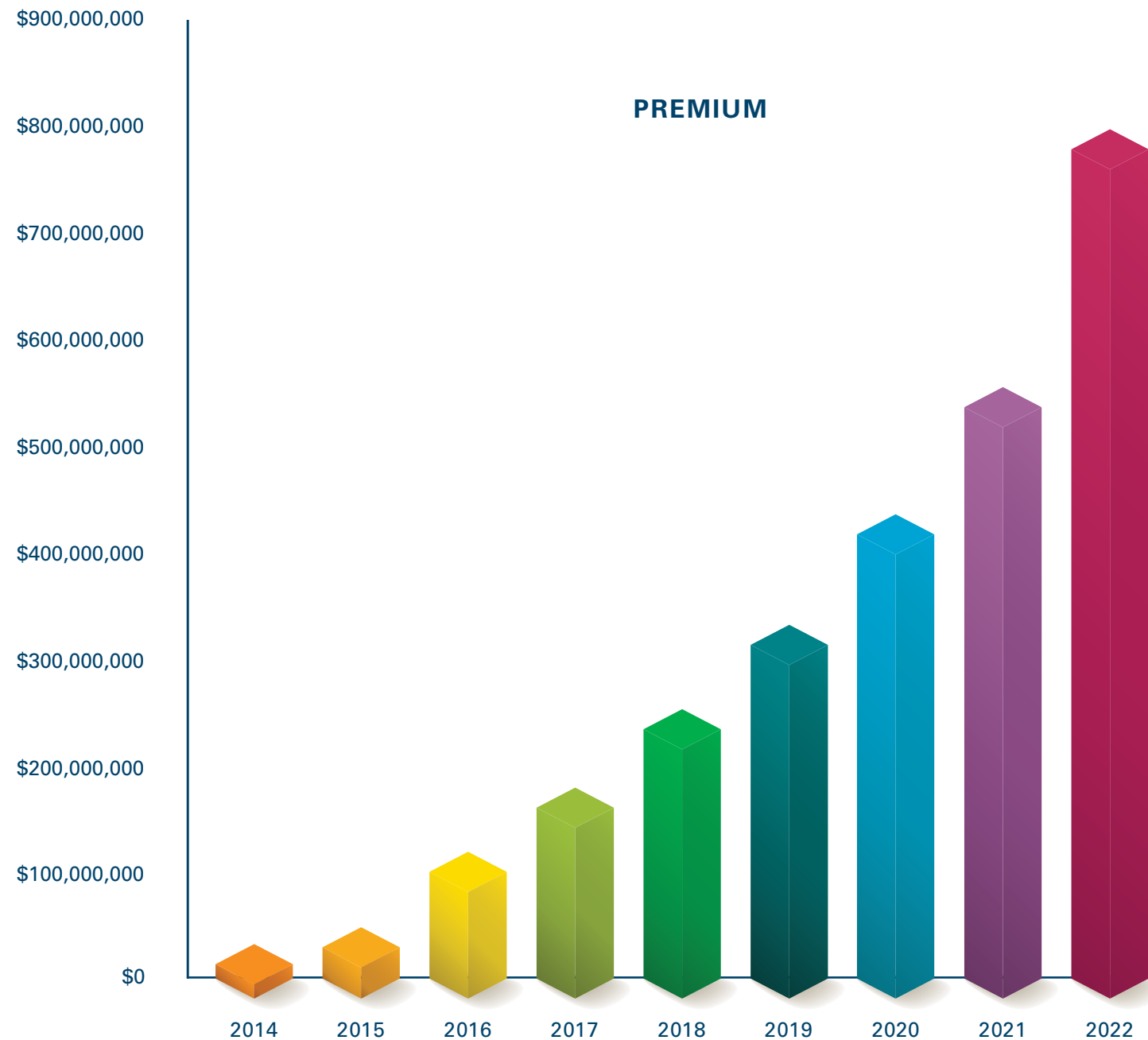
Total kidney transplants exceeded **25,000** for the first year ever. Annual records were also set for liver, heart and lung transplants. **14,903** people became deceased organ donors in 2022, which is a **7.5%** increase from 2021, and the 12th straight year showing an increase. Living donor transplants decreased slightly in 2021 to **6,466**. In 2022, there were **603** liver transplants involving living donors, an annual record and an increase of nearly **6%** above the total in 2021.

Source: UNOS.org - 2022 data



CAPTIVE GROWTH

Medical Stop Loss Captives continue to grow and be a larger portion of the stop loss market. Tokio Marine HCC entered the Stop Loss Captive space in 2012 and has since seen tremendous annual growth since. TMHCC has seen annual growth in our captive of at least 20% annually.

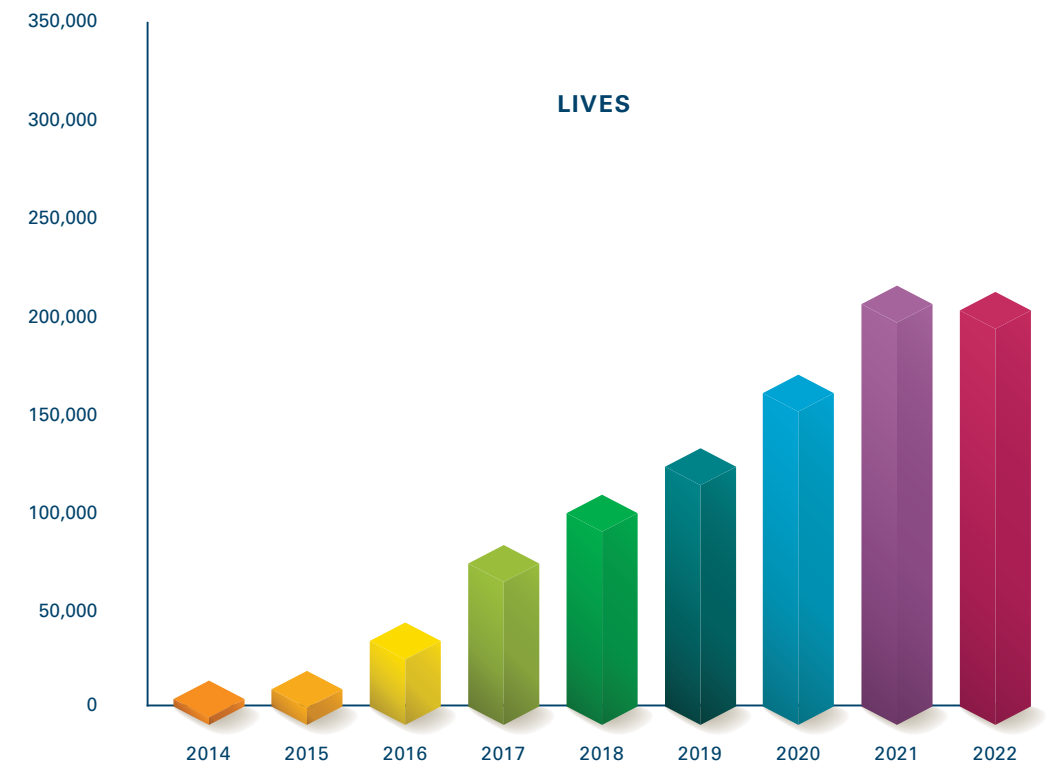


Captive Growth: Cases

Captives have allowed for employers previously thought to be too small for self-funding to share risk and limit volatility. The average size case in a stop loss captive is currently 168 employees. The average premium for a captive employer is \$456k, a less than 5% increase year-over-year since 2015.

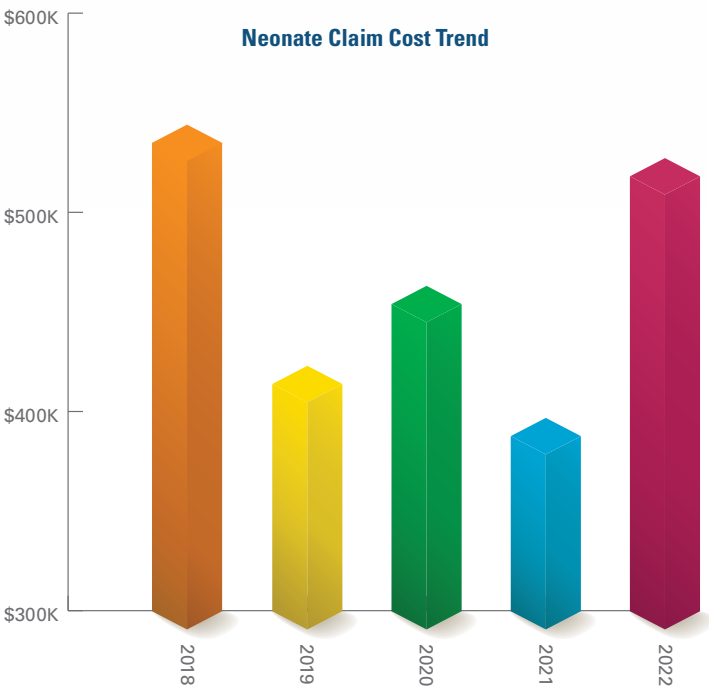
Captive Growth: Lives

Stop Loss Captives have proven over the last decade to be an excellent financial tool to assist small to mid-size employers to move into self-funded health benefits, thus allowing the employer more control of their costs and access to their own data. Captives are stable protection for employers that have a long-term cost saving mentality.





CLAIMS TREND AND SAVINGS



Neonates
 The neonate nurse reviews clinical and claims data to identify high dollar neonate cases for potential impact. Through pre-certs, claims, notices or direct contact from a Producer, Claims Administrator or Case Manager, our nurse is able to identify neonates and engage third-party vendors to assist with potential cost management.

Neonate Savings Example
 The neonate nurse identified a baby with a diaphragmatic hernia being treated at a specialty pediatric hospital that was out of state. She engaged a cost containment vendor to negotiate directly with the facility and was able to obtain a signed agreement that increased the discount from 5% to 25%.

Even with the increase in severity, our cost containment team continues to be successful in the reduction of neonate claims.

BILLED CHARGES
\$5,355,598.97

DISCOUNT BASED ON CONTRACT:
\$1,354,066.63

Payable Amount:
\$4,001,532.34

Preliminary Claims Unit (PCU)

PCU impacts both pre and post-pay claims through the utilization of third-party vendors for bill review and/or negotiation.

PCU Negotiated Savings Example

PCU identified a 41 y/o male with a diagnosis of COVID-19 leading to sepsis and respiratory failure with two separate dates of confinement. They engaged a cost containment vendor to negotiate directly with the facility and obtained a signed agreement for both confinements.

BILLED CHARGES
\$677,559.54

DISCOUNT BASED ON CONTRACT:
\$294,603.75

Payable Amount:
\$382,955.79

Specialty Claims Unit (SCU)

SCU Nurses review clinical and claims data to identify high-dollar medical scenarios. This includes transplant, cell and gene therapy, Rx, cardiac events and other high-dollar medical claims. They reduce these costs by accessing contracted facility rates which provide significant savings over network discounts.

SCU Negotiated Savings Example

SCU was contacted by a case manager about a 4 y/o with Aplastic Anemia who needed a stem cell transplant. They requested placement of a transplant contract. This claimant eventually required three transplants. The SCU nurse was able to intervene with separate transplants contracts for each event. Savings by transplant:

BILLED CHARGES
\$2,434,704.07

DISCOUNT BASED ON CONTRACT:
\$1,113,067.86

Payable Amount:
\$1,321,636.21

BILLED CHARGES
\$1,628,150.19

DISCOUNT BASED ON CONTRACT:
\$754,075.79

Payable Amount:
\$874,074.40

BILLED CHARGES
\$3,510,575.40

DISCOUNT BASED ON CONTRACT:
\$3,225,135.96

Payable Amount:
\$285,439.44



TO BE A GOOD COMPANY

Tokio Marine HCC is part of a global company that is rich in history, diversity and knowledge. To leverage these strengths, it is necessary for us to have a shared vision; a common thread that ties us together and makes us recognizable to our customers and the societies we work in around the world. Our vision reveals what we stand for and what we are striving to achieve. It is not a journey with a defined destination, rather a timeless endeavor and something that is embedded within our organization regardless of changes in people or changes through time. This is the vision of a Good Company.

We will balance our strength as an organization with compassion as individuals, looking beyond profit to deliver fully on our commitments. Through our collective efforts, we will strive to be a Good Company, living up to the trust placed in us.

LOOK BEYOND PROFIT

We act with integrity for the benefit of our customers, business partners and society.

GOOD COMPANY

EMPOWER OUR PEOPLE

We inspire engagement and passion in all of our employees.

DELIVER ON COMMITMENTS

We achieve high-quality results by enhancing stakeholder trust.



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